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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,616	08/23/2001	Toshiya Mori	NAK1-BP80	9001

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EXAMINER	
ALAM, MUSHFIKH I	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/935,616	MORI ET AL.	
	Examiner	Art Unit	
	MUSHFIKH ALAM	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/3/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/3/2008 have been fully considered but they are not persuasive.

Claim 11, Applicant argues that components of an interactive application. Thus, modules are not the interactive applications, but a mere piece of the interactive application. Thus, header 58 merely allows a CPU to determine if a piece of the interactive application should be decoded and/or stored into the memory rather than the entire interactive application itself. (Col. 4, Ins. 31 - 35).

In response to Applicant's argument, reading the claims in the broadest sense, the claim limitations referring to "programs" or "specific programs" are not limited to entire programs. The interpretation that these "programs" or "specific program" are modules is sufficient to meet the claim language.

Applicant further argues that there is no indication that the header 58 instructs the receiving apparatus to store the specific program. The header when it is an auxiliary packet contains information which allow the CPU to determine whether the module 51 should be decoded and where it should be loaded into the memory. However, enabling a CPU to perform the determination is not an instruction. That is, if auxiliary packet contained an instruction, then CPU would not need to determine whether module 51 should be decoded or not and if it should be decoded, where it should be loaded into

the memory. Instead, if auxiliary packet contained an instruction, an instruction would indicate that module 51 should be decoded and it should be stored in a certain location.

The Examiner respectfully disagrees. Broadly interpreting “instructs” is analyzed as an action resulting from a previous action. Similarly, if that action has a determining step in between the result is an instruction to perform that action. As noted in the Office Action, the header information is used to allow the CPU to determine (instruct based on header info) whether the module should be decoded and where it should be loaded into memory.

Applicant further argues that Depulch also does not teach or suggest "the scheduling unit includes a generation unit to generate (a) first messages which specify the specific program and instruct the receiving apparatus to store the specific program in a storing unit within the receiving apparatus."

In response to Applicant’s argument, Williard is relied upon to teach is limitation.

Applicant further argues that Willard does not teach that the transmission finishing time is the reproduction start time. Willard discloses the use of a "delivery time" and that the modules must have completed transmission by the delivery time but does not disclose when the exact delivery time should be, and if it should be the reproduction time, prior to the reproduction time, or after the reproduction time. Mores specifically, there is no teaching that the "delivery time" is when the module is scheduled to start to be reproduced.

Furthermore, even if the delivery time is considered the "reproduction time" and there is no indication that it is, Willard teaches that the scheduler causes all of the packets of a module, except the last packet to be transmitted between the start time and the delivery time. The last packet is specifically held until the delivery time and is then transmitted. (Col. 4, lns. 51 - 54). Thus, even if the delivery time is considered the "reproduction time," the entire module is not delivered prior to the reproduction time.

In response to Applicant's argument, the delivery time may be input by a user and thus is able to be any time needed. Williard discloses "the module may need to be delivered at a particular time". This particular time may be a time before the transmission time. Williard discloses "the delivery time may be provided by the user" (col. 6, lines 19-23). Thus, if the user defined delivery time is before the transmission time, the last packed will be delivered before the claimed "reproduction time."

Applicant further argues that Willard also does not teach or suggest "a transmission unit repeatedly transmits (a) the first messages for a duration from the transmission starting time to the transmission finishing time of the specific program, wherein the first messages are multiplexed with data modules containing data of the specific program." In Willard, the header 58 which is an auxiliary packet is mixed with data packets 59. Thus, Willard teaches the use of packetization to mix the data packets 59 with header 58 and not multiplexing since the frequency with which the header 58 is sent is determined by the size of the other data packets 59. Since the header is the first packet for the transmission unit 54, it cannot be arbitrarily sent at random time intervals.

The Examiner respectfully disagrees. Clearly disclosed on col. 6, lines 4-16 is that the packets are fed to a multiplexing unit for subsequent transmission.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willard (US 6374405) in view of Delpuch (US 5448568).

Regarding claim 11, Willard discloses a broadcasting apparatus (fig. 1 item 10) that broadcasts broadcast programs (col.4, lines 18-35); each of which is to be

reproduced by a receiving apparatus (fig. 1 item 20) in a reproduction time period between a reproduction starting time and a reproduction finishing time (i.e., where each program is reproduced, col.8, lines 5-14, each is inherently reproduced between a reproduction starting time and finishing time), the broadcast apparatus comprising:

a scheduling unit (fig. 3 item 34) to generate a schedule for transmitting the broadcast programs (col. 5, line 55-co1.6 line 16), the schedule including a transmission starting time and a transmission finishing time for each broadcast program (broadcast schedule for television programs, col. 5, lines 2-8; transmission start times and delivery times for interactive applications, col. 6, lines 34-42), and

wherein the scheduling unit generates the schedule so that (a) as for a specific program (fig. 7a, MOD. 1) among the broadcast programs, a transmission starting time (id. $1) which is a predetermined amount of time (id. I1) before the reproduction starting time (id. D1) of the specific program and a transmission finishing time is set at the reproduction starting time of the specific program (col. 9, lines 16-41; col. 4, lines 50-60), and (b) as for a broadcast program other than the specified program (i.e., a television program), a transmission starting time is set at the reproduction starting time of the broadcast program and a transmission finishing time is set at the reproduction finishing time of the broadcast program (where television programs are processed and reproduced at receiving station as they are received, col. 8, lines 5-15, transmission start and finish times correspond with reproduction start and finish times, respectively), the predetermined amount of time in the schedule generated by the scheduling unit is a time period necessary for transmitting the specific program at least once (col. 9, lines 36-42, col. 2, lines 59-61),

the scheduling unit includes generation unit to generate first messages (fig. 5 item 58) which specify the specific program and instruct the receiving apparatus to store the specific program (col. 7, lines 47-65) in a storing unit (fig. 6 item 67) within the receiving apparatus (co1.9, lines 61-66); and

a transmission unit (fig. 3 items 33, 34) repeatedly transmits the first messages (i.e., transmit aux packet 58 for each of transmission units 54a-c of module 51; see fig. 5) for a duration from the transmission starting time to the transmission finishing time of the specific program (col. 6, lines 7-17; col. 7, lines 54-65), wherein the first messages

are multiplexed with data modules containing data of the specific program (figs. 3 & 5; col. 5, line 55-col. 6, line 16),

the transmission unit repeatedly (cyclically, col. 8, lines 22-29) transmits contents including scripts (i.e., application code) for control for a duration from a broadcasting starting time of the specific program to a reproduction finishing time of the specific program (col. 7, line 28-col. 8, line 37), the transmission unit transmitting the entire specific program (entire module) at least once prior to the reproduction starting time (user initiated delivery time) of the specific program, and the scripts for control perform control so that the specific program is stored in case of receiving the first message (col. 7, lines 54-65).

Willard, however, is silent with respect to the second message and performing control so that the specific program is reproduced in case of receiving the second message.

In an analogous art, Delpuch discloses an apparatus and corresponding method for transmitting an interactive AN program (abstract), the system comprising:

a scheduling unit (fig. 1 item 16) operable to generate the claimed second message, which specifies the specific program and instructs the receiving apparatus to reproduce (e.g., resume) the specified specific program stored in the storing unit (col. 3, line 63-col. 4, line 4; col. 5 lines 44-45);

a transmission unit (fig. 1 item 28) operable to repeatedly transmit the second message (col. 11, lines 39-59) in the transmission time period of the specific program (col. 11, lines 19-26), and

the scripts for control perform control so that the specific program is reproduced in case of receiving the second message (col. 11, lines 27-38).

Delpuch further discloses that use of the second message alleviates situations resulting in undesirable displays produced by the interactive program (col. 10, lines 29-52), and that repeatedly transmitting the second message enhances the probability of reception (col. 11, lines 55-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Willard to include generating and repeatedly transmitting the second message and performing control so that the specific program is reproduced in case of receiving the second message, as taught by Delpuch, to improve presentation of interactive programs in the broadcasting system.

Regarding claim 12, Willard and Delpuch together disclose the apparatus of claim 11 wherein the generation unit generates a third message which specifies the specific program and instructs the receiving apparatus to delete the specific program stored in the storing unit (Delpuch: col. 10, lines 53-64).

Regarding claims 13-16, see Willard and Delpuch as applied to claims 11 and 12, above. Willard further discloses a computer-readable medium storing therein a computer program that, when executed, causes a broadcasting apparatus to perform a method comprising steps corresponding to the functions performed by the disclosed broadcasting apparatus (Willard: col. 6, lines 47-51).

Regarding claim 17, Willard and Delpuch disclose the broadcast system of claim 16 wherein the transmit unit transmits a control script that commands the receiver to execute (resume execution of) at least a portion of the main program (Delpuch: col. 10, lines 53-64).

Regarding claim 18, Willard and Delpuch disclose the broadcast system of claim 16 wherein the transmit unit transmits a command that commands the receiver to save at least a portion (store current status) of the data program (Delpuch: col. 10 11.58-60).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MUSHFIKH ALAM whose telephone number is (571)270-1710. The examiner can normally be reached on Mon-Fri: 8:30-18:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mushfikh Alam/
Examiner, Art Unit 2623
9/25/2008

/Vivek Srivastava/
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